



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 25, 2024

LICENSEE: Constellation Energy Generation, LLC

FACILITIES: Braidwood Station, Units 1 and 2; Byron Station, Unit Nos. 1 and 2; Calvert Cliffs Nuclear Power Plant, Units 1 and 2; Clinton Power Station, Unit No. 1; Dresden Nuclear Power Station, Units 2 and 3; James A. FitzPatrick Nuclear Power Plant; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; and R. E. Ginna Nuclear Power Plant

SUBJECT: SUMMARY OF APRIL 9, 2024, PUBLIC MEETING WITH CONSTELLATION ENERGY GENERATION, LLC REGARDING ESCAPE HOODS (EPID L-2024-LRM-0041)

On April 9, 2024, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Constellation Energy Generation, LLC (CEG, the licensee). The purpose of this meeting was to discuss the concept of using escape hoods for security personnel in lieu of the licensee's current fitted gas masks at Braidwood Station, Units 1 and 2; Byron Station, Unit Nos. 1 and 2; Calvert Cliffs Nuclear Power Plant, Units 1 and 2; Clinton Power Station, Unit No. 1; Dresden Nuclear Power Station, Units 2 and 3; James A. FitzPatrick Nuclear Power Plant; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; and R. E. Ginna Nuclear Power Plant (collectively, the CEG facilities). The meeting notice and agenda dated March 12, 2024, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML24074A061, and CEG's meeting handout is available at ML24089A261. A list of attendees is enclosed.

The licensee presented information regarding a potential change from its current full-face, fitted gas mask to an escape hood-style air purifying respiratory protective device for security personnel at the CEG facilities. During the meeting, the licensee:

- provided a high-level comparison between the current fitted mask used by CEG security personnel, the Avon PC50, and the proposed escape hood mask, the Avon NH15;
- discussed the various regulatory requirements and guidelines pertaining to respiratory protection;
- provided a detailed description of the Avon NH15 Air Purifying Escape Respirator Mask as background for justification for the potential change, and
- outlined potential licensing options that would allow the use of the Avon NH15 style mask.

The NRC staff noted that the regulations do not require the use of “fitted” protective masks and further that regardless of the method CEG may use to implement escape hoods (i.e., Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(p)(2), 10 CFR 73.5, or 10 CFR 73.55(r)), CEG should ensure that its security personnel’s use of escape hoods enables them to perform their assigned duties and responsibilities for the duration of the reasonable assurance of protection time (RAPT). The RAPT is described in SECY-20-0070, “Technical Evaluation of the Security Bounding Time Concept for Operating Nuclear Power Plants,” dated July 30, 2020 (ML20126G265), and in section 1.2 of Regulatory Guide (RG) 5.76, “Physical Protection Programs at Nuclear Power Reactors (SGI),” Revision 1, dated November 2020.

During the public comment portion of the meeting, in response to a question received from a member of the public, the NRC staff provided the following feedback:

- **Reasonable Assurance of Protection Time (RAPT):** A public member indicated that if RG 5.76 was revised in 2020 to allow licensees to credit local law enforcement response after 8 hours, and that if mask filters only lasts 8 hours, how did the licensees meet the “at all times” requirement prior to the revision?

The NRC staff indicated that the RAPT reflects the staff’s determination that a licensee’s current physical protection program meets the general performance objective of 10 CFR 73.55(b)(1) to provide reasonable assurance that “activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety” when that program is capable of independently defending against the design basis threat of radiological sabotage for a timeframe of at least 8 hours. The staff indicated that prior to November 2020, the NRC had generally considered 8 hours to be a sufficient period for licensees to demonstrate reasonable assurance of adequate protection, and the November 2020 revision to RG 5.76 simply provided formal clarification of the staff’s bases and the Commission’s expectation.

The NRC staff appreciated that the licensee held the meeting early in the development process so that staff comments could be considered in any licensing application CEG may elect to submit.

Two members of the public participated in the meeting. No regulatory decisions were made at this meeting. No feedback forms were received.

Please direct any inquiries to me at 301-415-2855, or Scott.Wall@nrc.gov.

Sincerely,

/RA/

Scott P. Wall, Senior Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, 50-317,
50-318, 50-461, 50-237, 50-249, 50-333,
50-373, 50-374, 50-352, 50-353, 50-220,
50-410, 50-277, 50-278, 50-254, 50-265,
and 50-244

Enclosure:
List of Attendees

cc: Listserv

LIST OF ATTENDEES

APRIL 9, 2024, PUBLIC MEETING WITH

CONSTELLATION ENERGY GENERATION, LLC

SECURITY FORCE PROTECTIVE GAS MASK

Name	Organization
Scott Wall	Nuclear Regulatory Commission (NRC)
Anthony Bowers	NRC
Jeff Whited	NRC
Desiree Davis	NRC
Lou Cubellis	NRC
Jeremiah Rey	NRC
David Hostetter	NRC
Steven Sarver	NRC
Wellington Tejada	NRC
Douglas Batche	Constellation Energy Generation, LLC (CEG)
John Young	CEG
Ron Reynolds	CEG
Michael Kunzwiler	CEG
Richard Gropp	CEG
David Gudger	CEG
Mike Whitlock	Nuclear Energy Institute (NEI)
Edwin Lyman	Union of Concerned Scientists

SUBJECT: SUMMARY OF APRIL 9, 2024, PUBLIC MEETING WITH CONSTELLATION ENERGY GENERATION, LLC REGARDING ESCAPE HOODS (EPID L-2024-LRM-0041) DATED APRIL 25, 2024

DISTRIBUTION:

PUBLIC	RidsNrrPMConstellation Resource	RidsNrrPMQuadCities Resource
RidsNrrDorl Resource	RidsNrrPMBraidwood Resource	RidsNrrPMREGinna Resource
RidsNrrDorlLp1 Resource	RidsNrrPMByron Resource	RidsNsirDso Resource
RidsNrrDorlLp3 Resource	RidsNrrPMCalvertCliffs Resource	RidsNsirSOSB Resource
RidsRgn1MailCenter Resource	RidsNrrPMClinton Resource	RidsOpaMail Resource
RidsRgn3MailCenter Resource	RidsNrrPMDresden Resource	JRay, NSIR
RidsNrrLAKZelevnock Resource	RidsNrrPMFitzPatrick Resource	LCubellis, NSIR
RidsNrrLAKEntz Resource	RidsNrrPMLaSalle Resource	DHostetter, NSIR
RidsNrrLASRohrer Resource	RidsNrrPMLimerick Resource	SSarver, NSIR
RidsNrrLASLent Resource	RidsNrrPMNineMilePoint Resource	WTejada, NSIR
RidsAcrs_MailCTR Resource	RidsNrrPMPeachBottom Resource	JRollins, NSIR

ADAMS Accession No.: ML24113A287

NRC-001

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DORL/LPL3/BC
NAME	SWall	SRohrer	JWhited
DATE	04/22/2024	04/23/2024	04/25/2024
OFFICE	NRR/DORL/LPL3/PM		
NAME	SWall		
DATE	04/25/2024		

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